IN THE CLAIMS

Claim 1 has been amended as follows:

1. (Currently amended) A method for testing a software system that operates a technical system, comprising the steps of:

operating a technical system installed at a customer facility and, while said technical system is operated during a normal usage time of the customer, generating ~~an~~ a computerized operation model ~~based on~~ that mimics a reproducible operation procedure~~, which monitors operation~~ that occurs during said normal usage time of [[a]] said technical system ~~of a~~ by said customer~~, under conditions that are relevant for said customer~~;

installing a software system in [[a]] said technical system of said customer for operating said technical system at said customer facility;

operating said technical system of said customer according to said operation model while using said software system ~~and~~, during a non-normal usage time ~~operation of said technical system~~ of said customer, at said customer facility to obtain a test result for said software system ~~,~~ ~~monitoring said technical system with said operation model~~; and

evaluating said test result ~~operation of said technical system of said customer with said operation model~~ to detect errors in said operation of said technical system caused by said software system.

Claim 2 has been amended as follows:

2. (Currently Amended) A method as claimed in claim 1 ~~comprising~~ wherein the step of installing a software system comprises installing said technical system with an original software system and operating said technical system with said original software system ~~with~~ according to said operation model during said non-normal usage time.

Claim 3 has been amended as follows:

3. (Currently Amended) A method as claimed in claim 2 comprising after operation and monitoring of said technical system of the customer ~~with~~ according to said operation model during said non-normal usage time, reverting to said original software to operate said technical system in said normal usage time.

4. (Original) A method as claimed in claim 2 comprising, from said evaluation of the operation of the technical system of the customer with the operation model, generating feedback and providing said feedback to a software developer.

5. (Original) A method as claimed in claim 4 comprising analyzing said feedback and developing an improvement of said original software system based on said feedback.

Claim 6 has been amended as follows:

6. (Currently Amended) A method as claimed in claim 1 comprising in generating said operation model, documenting, as protocol, at least one of input parameters, input data and boundary conditions of said technical system of said customer.

Claim 7 has been amended as follows:

7. (Currently Amended) A method as claimed in claim 6 comprising in generating said operation model, establishing limit values differentiating between error-free operation of said technical system and erroneous operation of said technical system.

Claim 8 has been amended as follows:

8. (Currently Amended) A method as claimed in claim 6 comprising in generating said operation model, automatically implementing an operation procedure associated with said technical system, in addition to said documenting.